

Tourism



Understanding Alaska Public Lands Visitors Through Collaboration: The Alaska Residents Statistics Program

By Peter J. Fix, Linda E. Kruger, Daniel W. McCollum, Susan J. Alexander, Lois Dalle-Molle, William Overbaugh, and Jeffrey J. Brooks

Abstract

The Alaska Residents Statistics Program (ARSP) is a collaborative effort among federal land management agencies to gather information on travel patterns, subsistence and recreation activities, and how public land relates to quality of life. To gather this information, the ARSP study group designed and administered the Alaska Residents Outdoor Activity and Travel Survey to over 2,000 Alaska residents in 2006-2007. Results showing how management decisions might impact subsistence and recreation on public lands will be useful for regional level planning.

Introduction

Alaska's vast acreage of public lands (72 million acres of Fish and Wildlife Service, 70 million acres of Bureau of Land Management, 53 million acres of National Park Service, and 22.5 million acres of U.S. Forest Service lands) provides a diversity of subsistence and recreation opportunities for residents of Alaska and visitors. Understanding those who use public lands is critical for effective management. With respect to non-resident visitors, some studies were conducted in Alaska before statehood (*Stanton 1953*). While the study of non-residents has continued with the Alaska Visitors Statistics Program, there has not been a comprehensive program to study residents.

Studies of residents do exist, but with limitations. For example, the Statewide Comprehensive Outdoor Recreation Plan (*Alaska State Parks 2004*) which gathers information on participation in activities, but not where activities are conducted or settings that may be desired; the National Park Service's Comprehensive Survey of the American Public gathers information related to national

parks; the Forest Service's National Survey on Recreation and Environment measures participation in myriad recreation activities, but might not generalize to specific sites in Alaska; and the Fish and Wildlife Service's National Survey on Hunting, Fishing and Wildlife Associated Recreation includes only a limited set of recreation activities. In addition, the above-mentioned studies tend to represent urban areas of Alaska, where the majority of the state's population is concentrated. While many on-site studies, or general population studies related to a specific area have been conducted in Alaska (*e.g., Giruad 2001; Brown and Reed 2000*), the results do not necessarily generalize beyond those sites.

The Alaska Residents Statistics Program (ARSP), a collaborative project among the U.S. Forest Service, National Park Service, Bureau of Land Management, Fish and Wildlife Service, the Alaska Department of Fish and Game, and the Alaska Department of Transportation, was developed to be a complementary program to the Alaska Visitors Statistics Program and gather information regarding Alaskans' recreation patterns and preferences as well as information on how public lands contribute to the quality of life in Alaska. The ARSP recognized that there are not unique USFS visitors, NPS visitors, etc. Rather, residents have preferences that lead them to visit many different types of public lands, and/or avoid certain types of public lands. Thus, it is critical to understand the preferences of Alaskans as a whole, not just focus on visitors to any one particular type of public land.

The ARSP study group developed and administered the Alaska Resident Outdoor Activities and Travel Survey (AROATS) to gather information on Alaska residents. The goal of the AROATS was to gather information on: where residents travel in Alaska; subsistence and recreation activities in areas traveled to, and activities in the area where they reside; areas they avoid; reasons for recreation; and factors contributing to quality of life. An additional goal was to have information that would represent rural areas of Alaska.

Methods

Survey Design: A mail survey with a map was designed to gather relatively detailed travel behavior. We first divided the state into five regions, based loosely on borough and conservation unit boundaries and geographic features. The regions represented were: Northern, Interior, Southwest, Southcentral, and Southeast (Figure 2). We divided each region into four smaller subregions. The subregions formed the units for which we measured travel to and participation in subsistence and recreation activities. The survey began by asking about travel and outdoor activities. Respondents were presented with a map that showed the subregions and key features in each subregion. Respondents were then asked if they traveled to (or lived in) each subregion and about their participation in 12 activities. The activities were: hiking, camping, wildlife viewing, freshwater fishing, saltwater fishing, food gathering, hunting and trapping, nonmotorized boating, motor boating, ATV/motorbike riding, skiing and snowshoeing, and snowmachining.

Respondents were also asked about visitation to public lands; sites they no longer visit (i.e., changes in visitation or displacement); reasons for participating in their activities; equipment ownership; value orientations towards wildlife; what brought them to Alaska, why they stay, and their plans to stay in Alaska after retirement; quality of life in Alaska; participation in hunting and fishing; and demographics. The demographic section included questions about where respondents lived prior to moving to Alaska, if applicable.

Sampling: To construct the basis for sampling, each city/village in Alaska, as defined by the U.S. Census Bureau, was placed into the appropriate region. Populations of the regions varied from 14,654 to 266,293 (for detailed information on the strata and response rates, see Fix and Tracy 2008). After examining the percentage of the population registered to vote and comparing the Alaska voter registration database (VRD) to commercially purchased samples, the VRD was chosen as the most appropriate sampling frame. For those regions with a high correspondence between the Census cities and the VRD (North, Southwest, Southeast) a proportional sample of approximately 2,000



Figure 2. Survey regions for the Alaska Residents Outdoor Activities and Travel Survey.

was randomly selected. For the Interior and Southcentral, which had lower correspondence between the Census and VRD, a random sample of 2,000 was selected for each region. Respondents were mailed a postcard announcing the survey, followed by the survey, a reminder/thank you postcard, and a second survey for those who had not responded. After the second mailing, a third mailing was conducted for those cities/villages that remained under-represented.

Results

Response rate varied by geographic strata from 19% to 31%, with an overall response rate of 27%. A nonresponse test, consisting of three questions, was conducted for 146 nonrespondents. No practical differences were found between those who completed the survey and those who did not.

Travel: As expected, the Anchorage subregion of the Southcentral region had the highest visitation rate from each region (ranging from 25% to 49%), followed by the Fairbanks-Ft. Yukon subregion of the Interior region (ranging from 10% to 26%). The North and Southwest regions exhibited low intra-region travel with the average percent of respondents traveling to other subregions 7% and 6%, respectively (adjusted to account for population). Whereas the Southeast region (off the road system with operating ferries) showed higher intra-regional travel, averaging 19%.

Activity participation: Activity participation differed by regions. Food gathering had the highest percent of people participating in the past 12 months for the Northern and Southwest regions, 69% and 77%, respectively; hiking had the highest percent of participants in the Interior, Southcentral and Southeast regions, 57%, 64%, and 75%, respectively.

Displacement: The Kenai and Russian Rivers topped the list of areas people no longer visit, including people who reported a change in visitation patterns. Respondents from each region mentioned these two sites as places they no longer visit from a high of 20% for the Southcentral region to < 1% for the Southeast region. The overwhelming reason reported for displacement was crowding. Second to the Kenai and Russian Rivers was the Denali Park area (Denali National Park, State Park, and just “Denali Park”), also being mentioned by respondents from each region. The range of visitors being displaced was 4% in the Interior region to 1% in the Southeast and North regions. Crowding and commercialization were the most often cited reason for changing visitation patterns to the Denali Park area.

Significant activities and reasons for participating: When asked to identify a significant activity and select from a list of possible reasons for participating, fishing, hiking, and hunting were the top three activities (with 607, 450, and 437 respondents selecting those activities, respectively). However, there were differences in the most often cited activities by region (Figure 3). The top reason for fishing and hunting was to obtain meat/food, and the top reason for hiking was exercise and physical fitness.

Demographics: The North region had the highest percent of respondents born in Alaska (61%) followed by the Southwest. Each region had a small percentage of people who were born in Alaska but spent some time outside of Alaska. For the respondents who were not born in Alaska, Washington, California, and Oregon were the most often cited states as to where people lived before moving to Alaska.

Discussion and Management Implications

This project resulted in data that will serve two purposes: 1) it provides another piece of information regarding subsistence and recreation patterns for resident Alaskans, and 2) it can be used as a much needed source of social science information by various agencies for specific planning purposes. Collaboration on this project ensured that survey results and the initial database will be useful for each participating land management agency. While the information gathered by this project will not replace site specific research, it does support region level planning by identifying how changes in population, growth, and management policies at a particular conservation unit might impact subsistence and recreation activities on public lands.

Significant activity	Rank of significant activity by region				
	North	Interior	Southwest	Southcentral	Southeast
Fishing	2	1	1	1	2
Hiking	5	3	3	2	1
Hunting	1	2	2	4	3
Camping	4	4	5	3	4
Berry Picking and Food Gathering	3	5	4	6	6
Boating	7	7	7	14	5
Snowmachining	8	6	10	5	27

Figure 3. Ranking of significant activity by region. The respondents were asked: "Please list up to two outdoor recreation or subsistence activities that are significant to you. 1 = the most important activity."



NPS photograph by R. Winfree

Figure 4. Wildlife viewing.



NPS photograph by R. Winfree

Figure 5. Hikers on the Chilkoot Trail.

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